

A NEW SPECIES OF RUMFORDIA (ASTERACEAE, HELIANTHEAE)  
FROM NUEVO LEON, MEXICO

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Routine identification of Mexican Asteraceae has revealed the following novelty. It is closely related to R. alcortae and differs most markedly by having exauriculate petioles.

RUMFORDIA EXAURICULATA B. Turner, sp. nov.

R. alcortae Rzed. similis sed foliis plerumque majoribus et tenuioribus petiolis exauriculatis et flosculis radiatis numerosioribus differt.

Suffruticose herbs or shrublets 1-2 m high. Stems terete, purplish, variously puberulent to glandular-pubescent, these sometimes intermixed. Heads hemispheric, radiate, 5-40 in a terminal capitulescence, ultimate peduncles mostly 2-4 cm long. Involucres 5-7 mm high, 2-3 seriate, the bracts subequal, the outer series weakly spreading, rarely reflexed. Receptacle hemispheric, paleate with persistent pales, the latter as long as, or somewhat longer than, the enfolded florets. Ray florets mostly 21, pistillate, fertile, the ligules yellow, 5-9 mm long. Disk florets numerous, fertile, the corollas yellow, the tubes ca 1.5 mm long, glandular-pubescent, the throat ca 2 mm long, the lobes ca 1/2 mm long. Achenes glabrous, somewhat radially compressed, falcate, black and striate at maturity, ca 2 mm long, epappose.

Chromosome number,  $n=16$  pairs.

TYPE: MEXICO.NUEVO LEON: Mcpio. Doctor Arroyo, ca 35 km NE of Doctor Arroyo, along road ca 0.5 mi S of "El Puerto," NE of San Antonio Pena Nevada, NW side of Cerro Pena Nevada, 2650 m, oak woods, "abundant on steep banks below road, also under oaks," (23° 46' N, 99° 52' W), 16 Oct 1988, Guy Nesom 6788 with D. Morgan (holotype: TEX; isotypes: ANSM, ARIZ, CAS, MEXU, MO, NY, US, XAL).

ADDITIONAL SPECIMENS EXAMINED: MEXICO.NUEVO LEON: Mcpio. Villa de Santiago, Canon la Boca, Laguna de Sanchez (25° 24' N, 100° 19' W), 1600 m, 10 Aug 1983, Villarreal et al. 2353 (TEX); Mcpio. Aramberri, Cerro Grande, 2400 m, 14 Sep 1986, Hinton et al. 19038 (TEX); Cerro Grande, 2380 m, 10 Oct 1986, Hinton et al 19061; Mcpio. Galeana, Cerro El Gallo, 2100 m, Hinton et al. 19186 (TEX).

Rumfordia exauriculata superficially resembles immature specimens of Smallanthus uvedalius (L.) Mackenzie; indeed, so much so that I needlessly filed the above cited specimens (except the type) with that taxon. Subsequent, careful examination, reveals these to belong to Rumfordia, closely related to, but clearly distinct from R. alcortae. The latter occurs to the south of R. exauriculata (Fig. 1) and is readily recognized by its leaves, which have conspicuous auricles at the base of the petioles. Such auricles tend to be deciduous with age, but the 7 or more collections of this species which I have examined reveal the auricles to be present on at least some, if not all, of the leaves. The auricles were not present on any of the

above-cited specimens of *R. exauriculata*. In addition, the latter species has larger, thinner leaves and the heads have mostly 21 ray florets (rarely as few as 15).

Sanders (1977) did not examine sheets of this taxon in his treatment of *Rumfordia*. He did note, however, that its closest relative, *R. alcortae*, was distinctive and did not readily relate to other members of the genus. I agree with this assessment and would argue that *R. alcortae* and *R. exauriculata* are as close to *Smallanthus* as they are to *Rumfordia*, differing from the former largely by their fertile disk florets or hemisphere receptacles, although Robinson (1981) would position these in different subtribes. Sanders (1977) notes that the only known chromosome count for *Rumfordia* is  $n=24$  pairs in *R. floribunda*. *Rumfordia exauriculata* appears to have a chromosome number of  $n=16$  pairs, which is also found in *Smallanthus uvedalius*. However, as noted by Sanders, counts of  $n=16$  pairs may be tetraploid on a base of  $x=8$ . Thus, *Rumfordia floribunda* may also have an ancestral base of  $x=8$ , the number  $n=24$  pairs being possibly hexaploid or  $6x$ .

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#### LITERATURE CITED

- Robinson, H. 1981. A revision of the tribal and subtribal limits of the Heliantheae (Asteraceae). *Smithsonian Contr. Bot.* 51:1-102.
- Sanders, R.W. 1977. Taxonomy of *Rumfordia* (Asteraceae). *Syst. Bot.* 2:302-316.

